

Title (en)
HYDRAULIC REGENERATOR

Title (de)
HYDRAULISCHER REGENERATOR

Title (fr)
REGENERATEUR HYDRAULIQUE

Publication
EP 0629781 B1 19960327 (EN)

Application
EP 94918228 A 19931203

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Abstract (en)
[origin: EP0629781A1] A hydraulic regenerator provided in a hydraulic driving unit which is provided with a plurality of actuators (4, 5) operated by a pressure oil supplied from a capacity-variable type hydraulic pump (1), and a plurality of direction change-over valves (2, 3) respectively provided between the hydraulic pump and actuators and adapted to control a flow of the pressure oil supplied to the corresponding actuators; and having variable resistance means (6, 60) provided in a first line (12), via which a tank port (23) of at least one direction change-over valve (2) out of the direction change-over valve and a tank (9) communicate with each other, and adapted to control the flow rate of the pressure oil flowing from a tank port to the tank in accordance with a control signal (Px), a third line (14) via which a portion on the upstream side of the variable resistance means in the first line and a second line (10C) connected to pump port (24) of the above-mentioned direction change-over valve communicate with each other, and a check valve (7) provided in the third line and allowing only a flow of the pressure oil running from the first line to the second line. This hydraulic regenerator is further provided with (a) means (101, 106, 102a, 102b, 103a, 103b) for de- Pib1, Pib2) associated with the operation of the tecting the quantities of state (Pd, Ph, Pia1, Pia2, above actuators (b) control means (100, 100A-100H) receiving signals from the detecting means and generating on the basis of the preregistered relation driving signals (i, i*) corresponding to the above-mentioned quantities of state, and (c) a control signal generating means (105) adapted to receive the above-mentioned driving signals and generate the above-mentioned control signal (Px) in accordance with the same driving signals, and it is designed so as to enable the characteristics of the variable resistance means to be set arbitrarily, and sudden variation of a regeneration flow rate to be prevented. <IMAGE>

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IPC 8 full level
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